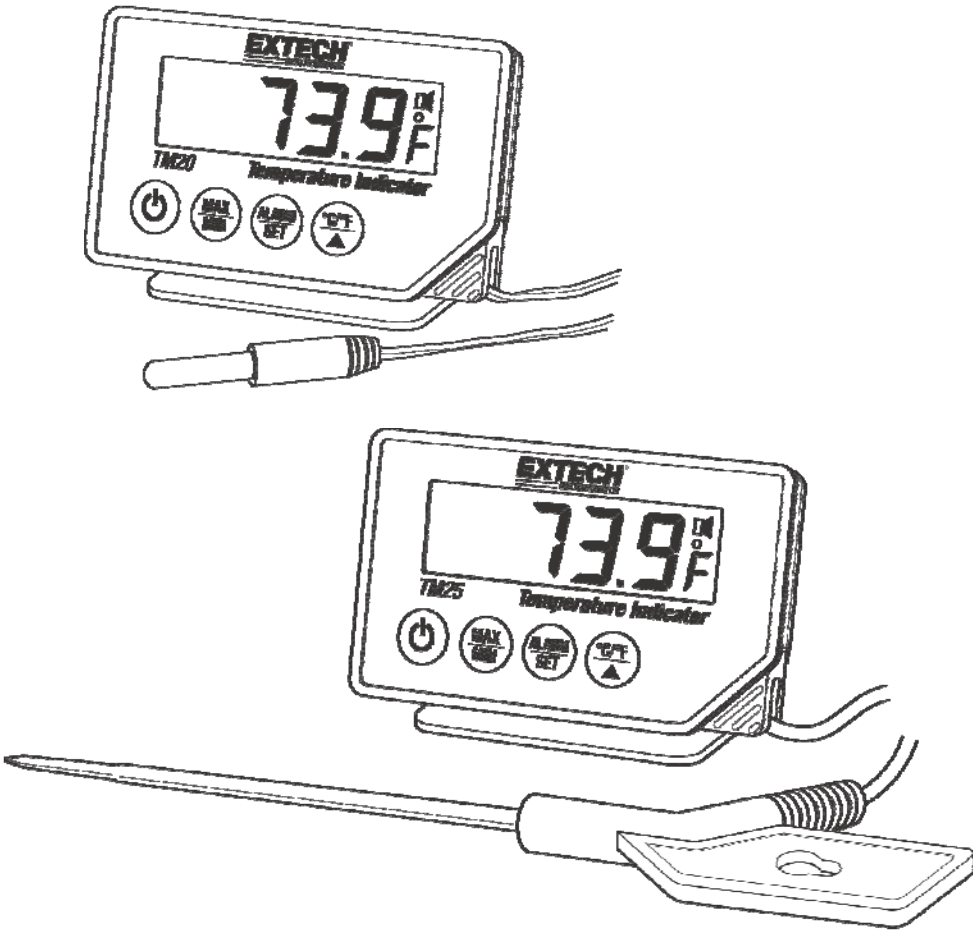
USER GUIDE

Extech TM20 Compact Temperature Indicator
Extech TM25 Compact Temperature Indicator

Portable Thermometers

Model TM20 thermometer with standard probe

Model TM25 thermometer with penetration probe



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Introduction

Thank you for selecting this Extech Portable Thermometer for home use. This device is intended for use in measuring the temperature of air, liquid, paste, or semi-solid materials. The TM20 uses a standard temperature probe while the TM25 is equipped with a penetration probe for insertion into materials under test. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Extech Instruments is an ISO-9001 certified company.

Safety

International Safety Symbols

This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.

This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

Double insulation

General Safety

- Please read all safety and instructional information before using these products.
- These products are intended for home use only on air, liquid, pastes, and semi-solid materials.
- Unauthorized repairs, modifications, or other changes to the products are not supported.
- This product is not intended for use in medical practice.

Caution! Risk of Injury!

- Keep these products, their probes, and batteries out of the reach of children and pets
- Use extreme caution when handling the probes
- Batteries must not be placed in fire, short circuited, taken apart, or discharged. Risk of explosion!
- Batteries can be fatal if swallowed. Contact medical emergency personnel if batteries are swallowed.
- Batteries contain harmful acids. Low batteries should be changed as soon as possible to prevent damage caused by leaking batteries.

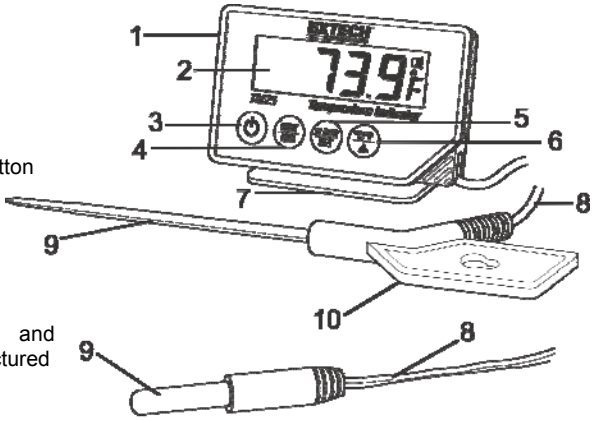
Product Safety!

- Do not place these products near extreme temperatures, vibration, or shock
- Only the probes are heat resistant to 392°F (200°C) for the TM25 probe and to 158°F (70°C) for the TM20 probe, not the meters themselves
- Never hold a probe directly in or over fire
- Do not immerse the meters in any liquid

Description

Meter Description

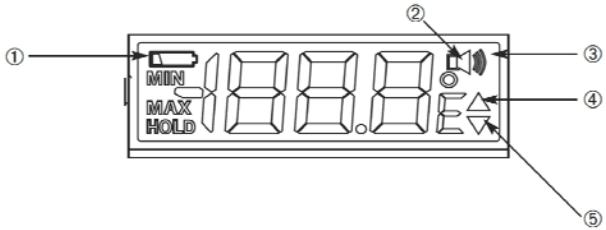
1. Meter
2. LCD display
3. Power ON/OFF button
4. MAX/MIN button
5. ALARM/SET button
6. Temperature units/up arrow button
7. Meter stand/base
8. Sensor cabling
9. Sensor tips
10. Probe mounting bracket



Note: Wall mount access hole and magnet on rear of instrument not pictured

Advanced Display Symbols

1. Low battery symbol
2. Alarm symbol
3. Flashing Alarm Alert
4. High Alarm symbol
5. Low Alarm symbol



Specifications

Display	Multi-function LCD
Measurement range	TM20: -40 to 158°F (-40 to 70°C)
	TM25: -40 to 392°F (-40 to 200°C)
Resolution	0.1°F/°C
Accuracy	0.9°F: 32° to 122°F
	1.8°F: -4° to 32°F and 124° to 158°F
	3.6°F: -40° to -4°F and 158° to 392°F
	0.5°C: 0° to 50°C
	1.0°C: -20° to 0°C and 51° to 70°C
	2.0°C: -40° to -20°C and 70° to 200 °C
Protection safety rating	IP 65 rating on meter and sensors
Low battery indication	Battery symbol appears on the LCD
Power supply	CR2032 3V button battery
Meter Dimensions	3.4(L) x 2.2(H) x 1.2(D)" / 86(L) x 57(H) x 30(D)mm
Cable length	9.2' (2.8m) sensor cable

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Operation

Display Protective Foil

The meter's display is shipped with a protective foil covering. Please remove carefully before use.

Powering the meter

Open the battery compartment by loosening the two screws located on the back of the meter (on either side of the magnet). Insert a new CR2032 3V lithium button battery and close the cover. If a battery is already installed, remove the insulation strip so that the battery can make proper circuit contact.

The instrument is now ready for use. Press the ON/OFF key once to power the meter. The meter's previous settings will be preserved.

Selecting °C/°F units of measure

Press the °C/°F key to select the desired temperature unit of measure.

MAX-MIN and HOLD Function

To freeze (hold) the displayed reading, press the MAX/MIN key. The current reading will be held on the display and the HOLD display icon will be visible. Press MAX/MIN again to view the Maximum reading captured since the last reset; the MAX indicator will be visible along with the MAX reading. Press MAX-MIN again to view the Minimum (MIN) temperature reading; the MIN icon will be visible along with the lowest reading captured since the last reset. To reset the MAX and MIN values press and hold the MAX-MIN button for 3 seconds while the MAX or MIN icon is visible. To return to normal operation press the MAX/MIN key again; the HOLD-MIN-MAX indicators should now be off.

Temperature Alarms

Set high/low alarm limits and the meter will audibly and visually alert the user if either limit is exceeded. To set the alarm values, follow these steps:

1. Press the ALARM/SET button once from the normal operating mode; the upper limit value and its symbol (up arrow) will flash.
2. Set the temperature limit by pressing the ▲ button (press and hold for fast scrolling).
3. Now use the MAX/MIN button to activate/deactivate the alarm (alarm symbol will appear in the upper right hand corner of the LCD when activated).
4. Verify the setting by pressing ALARM/SET.
5. Perform the same steps for the low alarm limit.

After setting the alarms, the upper and lower limit symbols (▲▼) will be displayed on the LCD indicating that an upper and a lower alert value has been set. If the measured temperature exceeds either limit, the alarm beeper will sound for 1 minute. The alarm beeper icon and the corresponding arrow will flash. Pressing any button will switch off the alarm.

When the temperature returns to the desired range the audible alarm will stop sounding. The arrow will remain flashing however to show that the temperature was higher or lower than a set value at least once in the past. Press the ▲ button to switch OFF the flashing arrow.

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Warranty

FLIR Systems, Inc. warrants this Extech Instruments brand device *to be free of defects in parts and workmanship for* ***one year*** *from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department for authorization. A Return Authorization (RA) number must be issued before any product is returned. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. FLIR Systems, Inc. specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. FLIR's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.*

Calibration, Repair, and Customer Care Services

FLIR Systems, Inc. offers repair and calibration services for the Extech Instruments products we sell. NIST certification for most products is also provided. Call the Customer Service Department for information on calibration services available for this product. Annual calibrations should be performed to verify meter performance and accuracy. Technical support and general customer service is also provided, refer to the contact information provided below.

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Calibrage, réparation et services après-vente

FLIR Systems, Inc. offre des services de calibrage et de réparation pour les produits Extech Instruments que nous commercialisons. Nous fournissons également une certification NIST pour la plupart des produits. Contactez notre service client pour toute information sur les services de calibrage disponibles pour ce produit. Un calibrage doit être effectué chaque année pour vérifier les performances et la précision du mètre. Nous offrons également une assistance technique et un service à la clientèle. Veuillez vous reporter aux coordonnées fournies ci-dessous.

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Garantía

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Servicios de calibración, reparación y atención a clientes

FLIR Systems, Inc., ofrece servicios de reparación y calibración para los productos que vendemos de Extech Instruments. Además ofrecemos certificación NIST para la mayoría de los productos. Llame al Departamento de Servicio al Cliente para solicitar información de calibración para este producto. Para verificar el funcionamiento y precisión se debe realizar la calibración anual. Además se provee Soporte Técnico y servicios generales al cliente, consulte la información de contacto en seguida.

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